

Fig.1

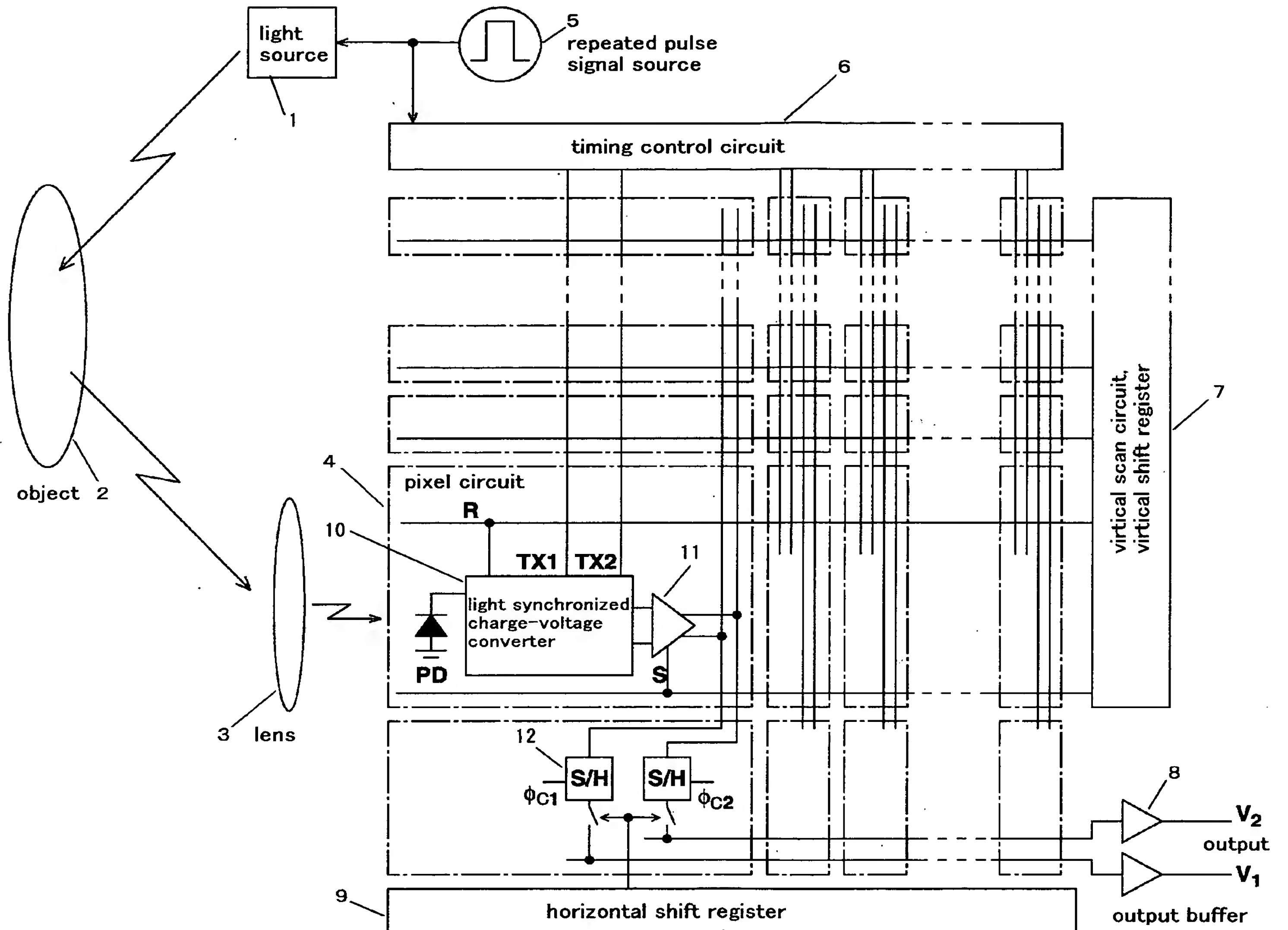


Fig.2

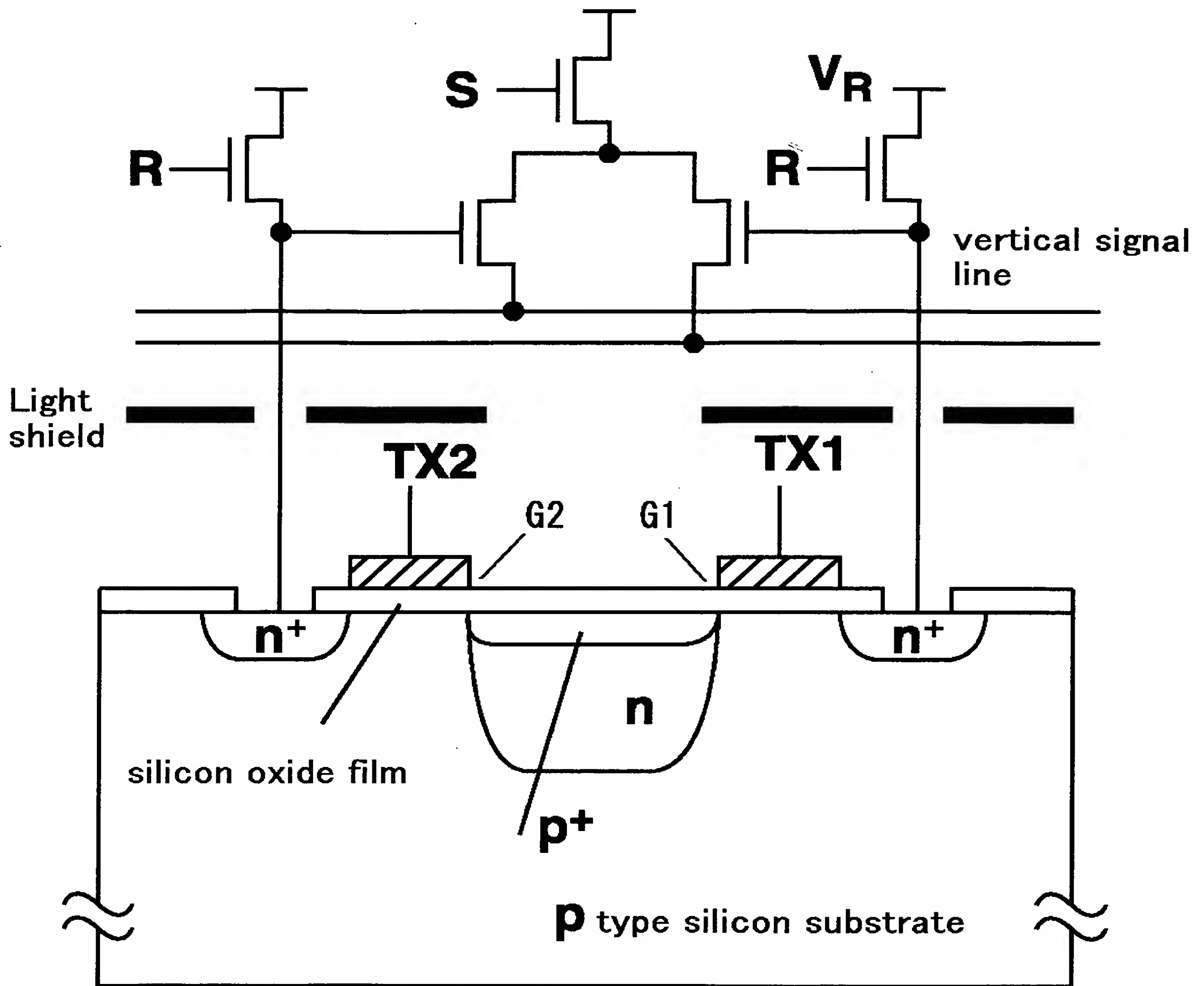


Fig.3

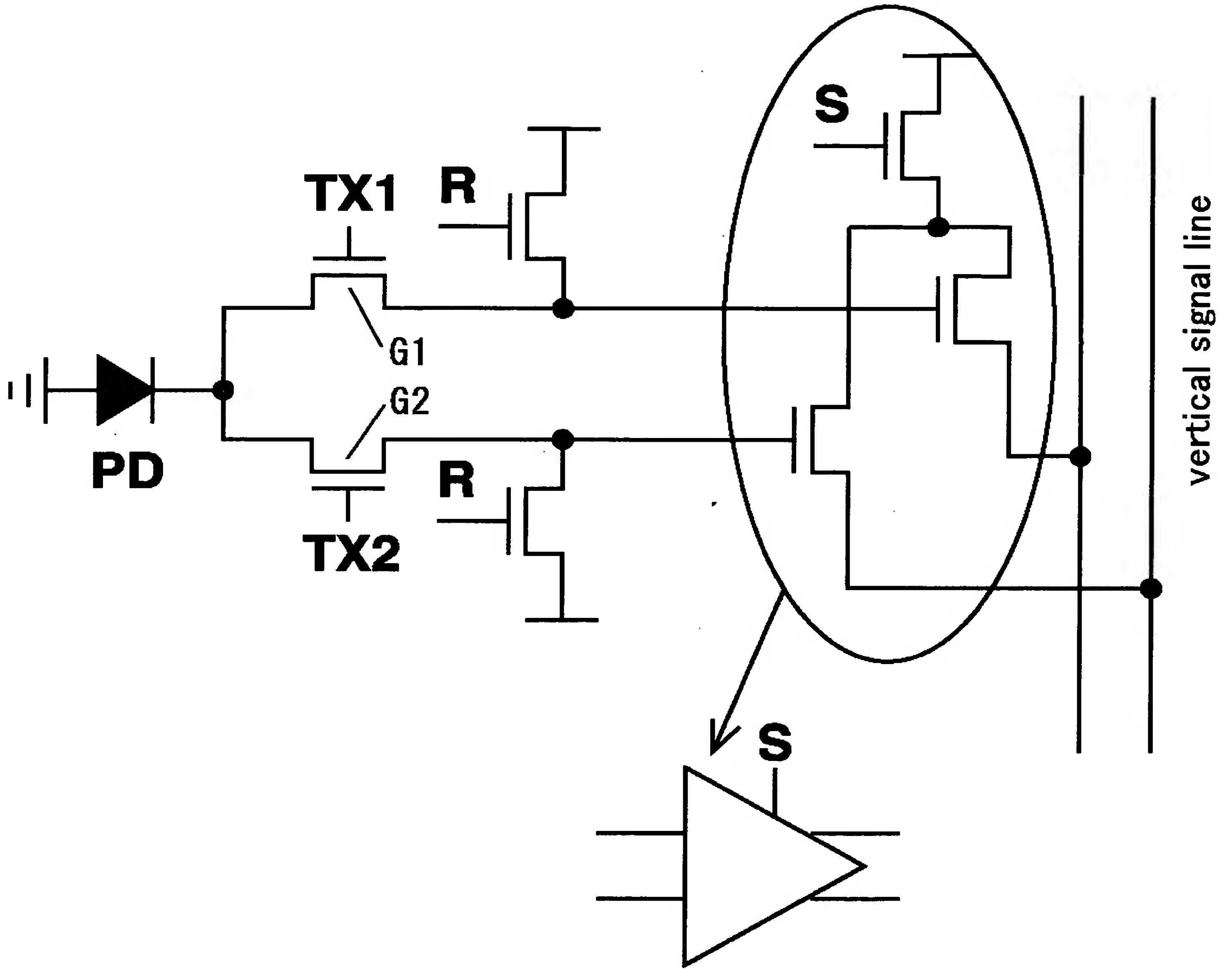


Fig.4

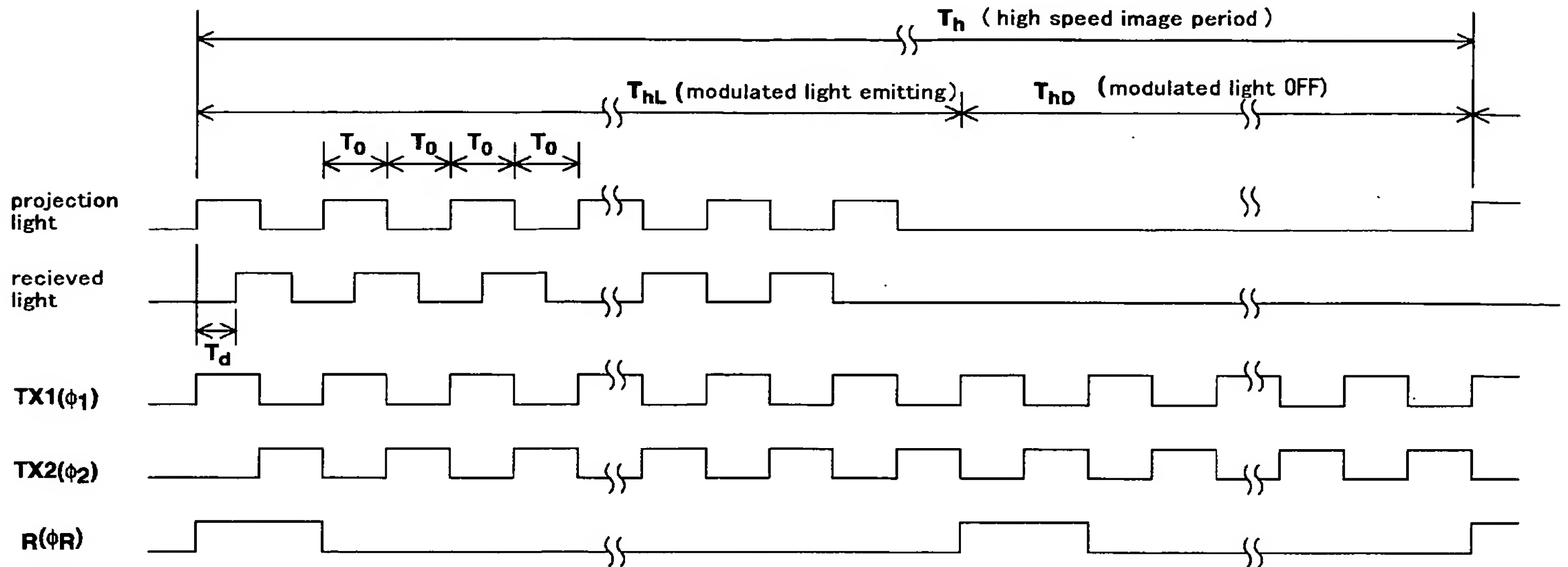


Fig.5

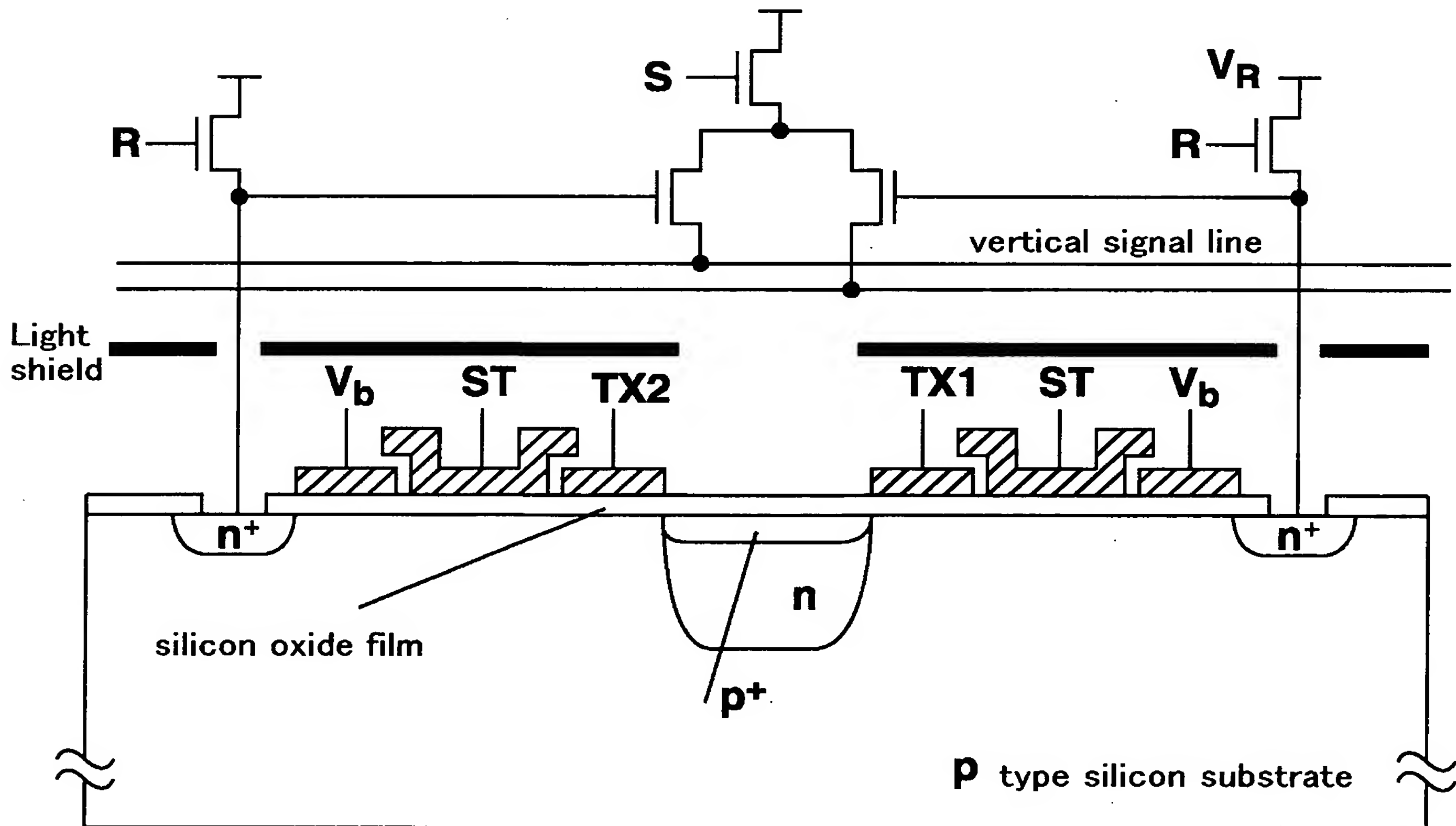


Fig.6

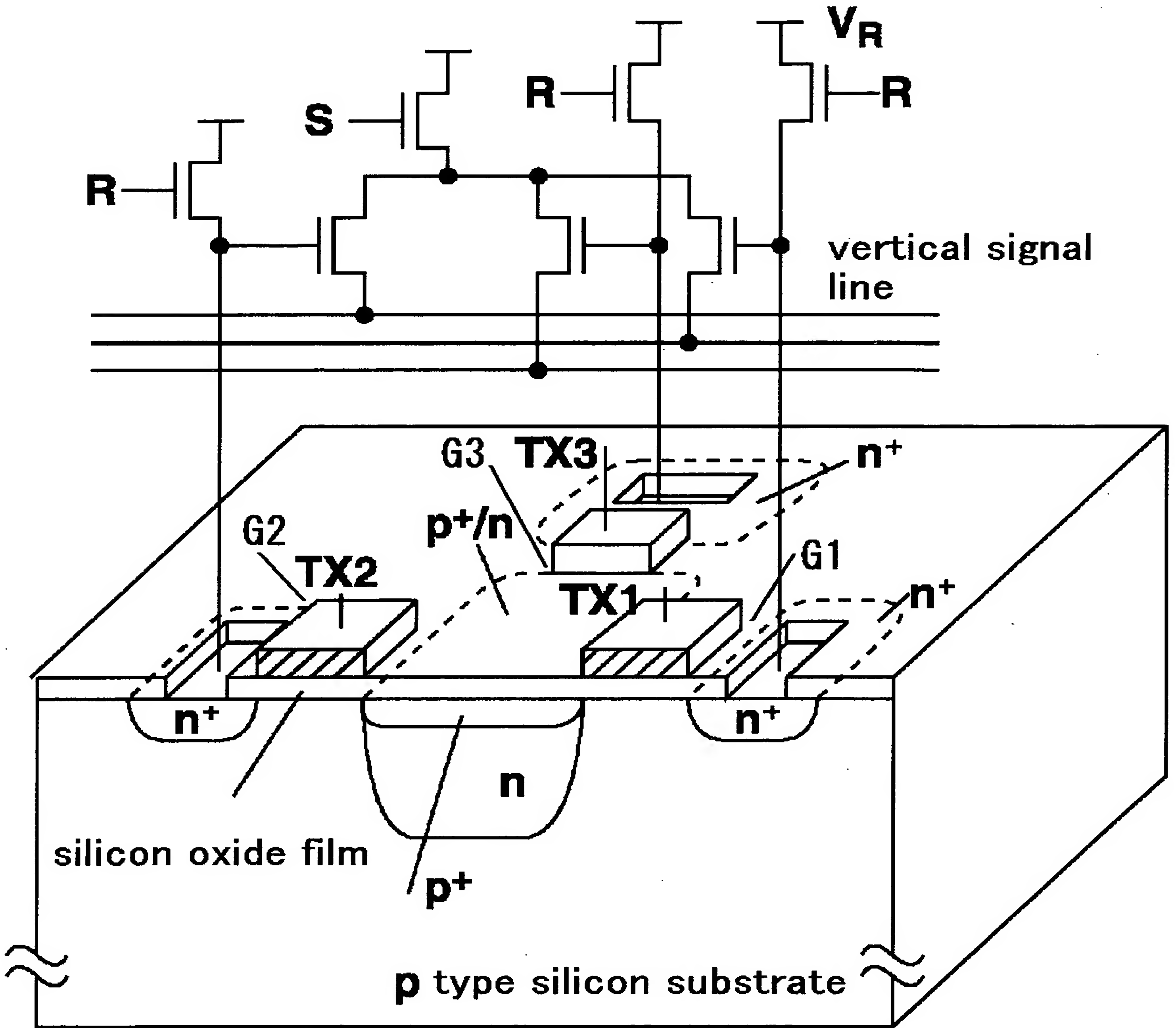


Fig.7

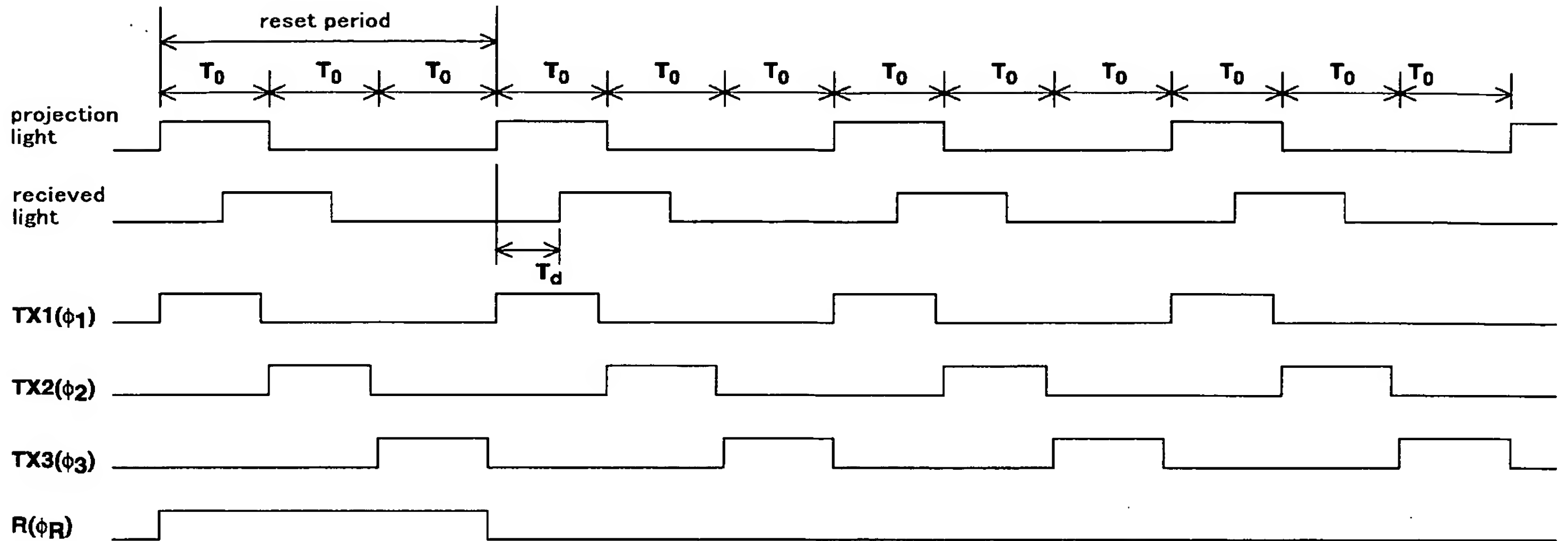


Fig.8

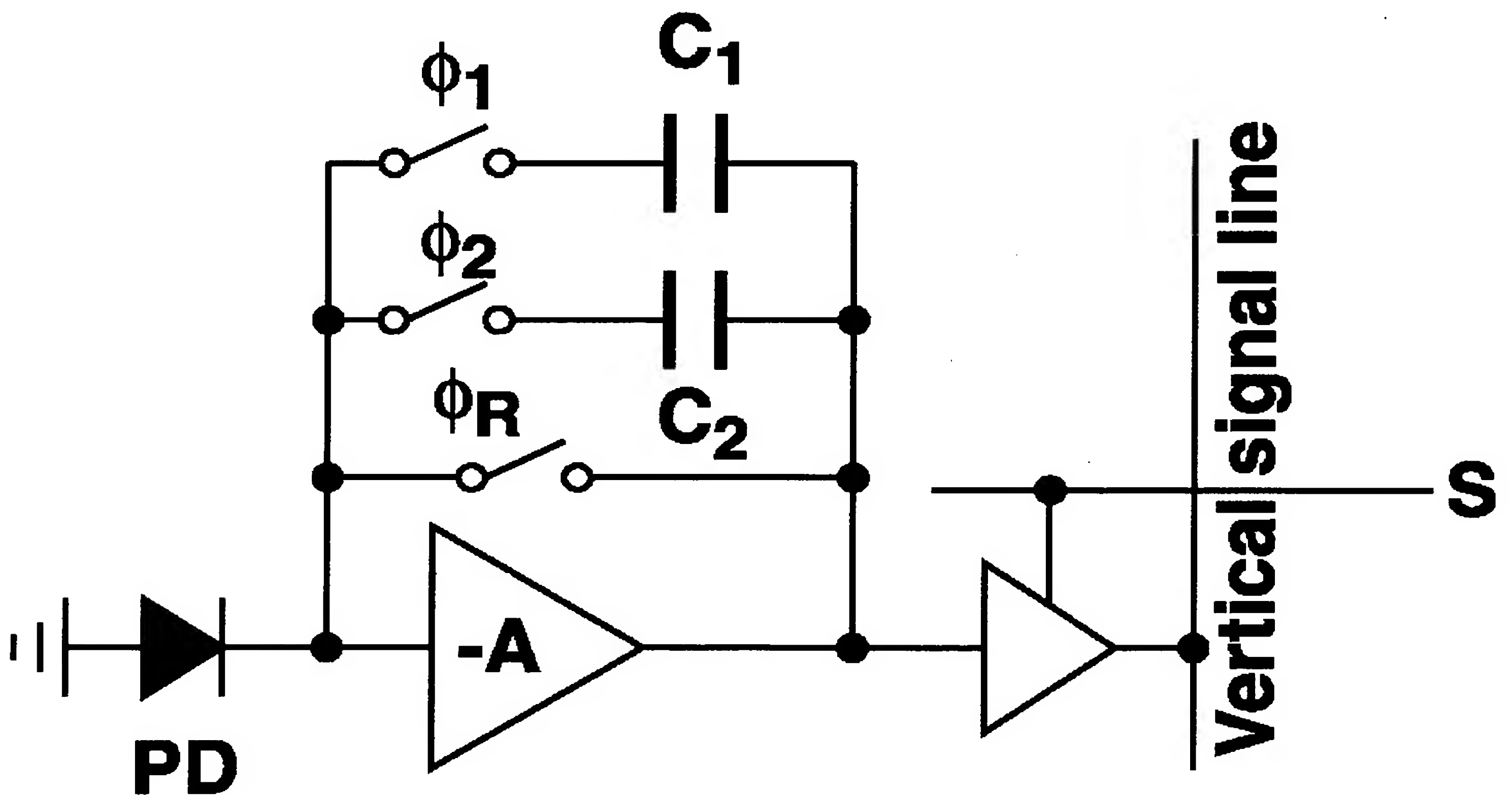


Fig.9

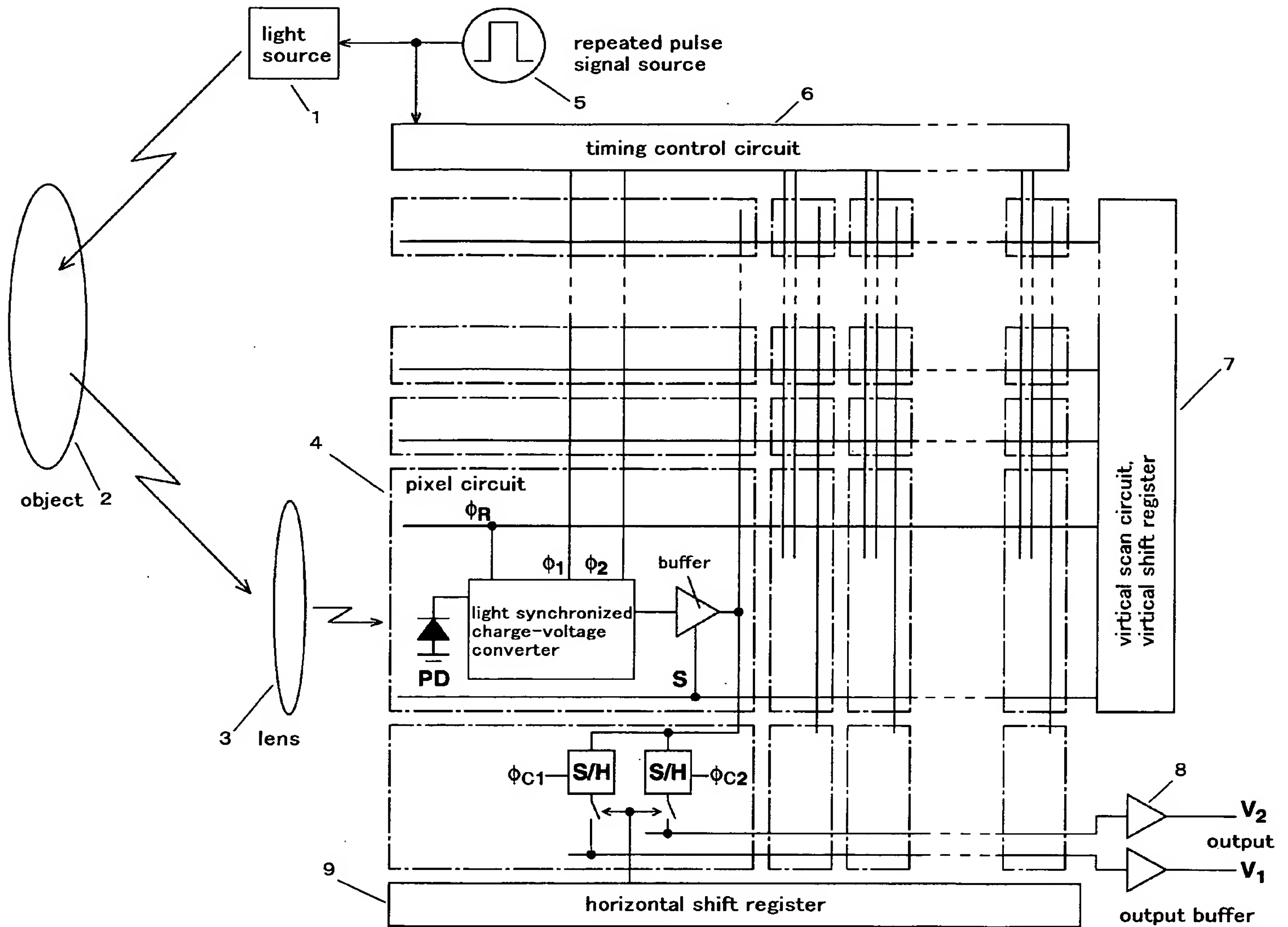


Fig.10

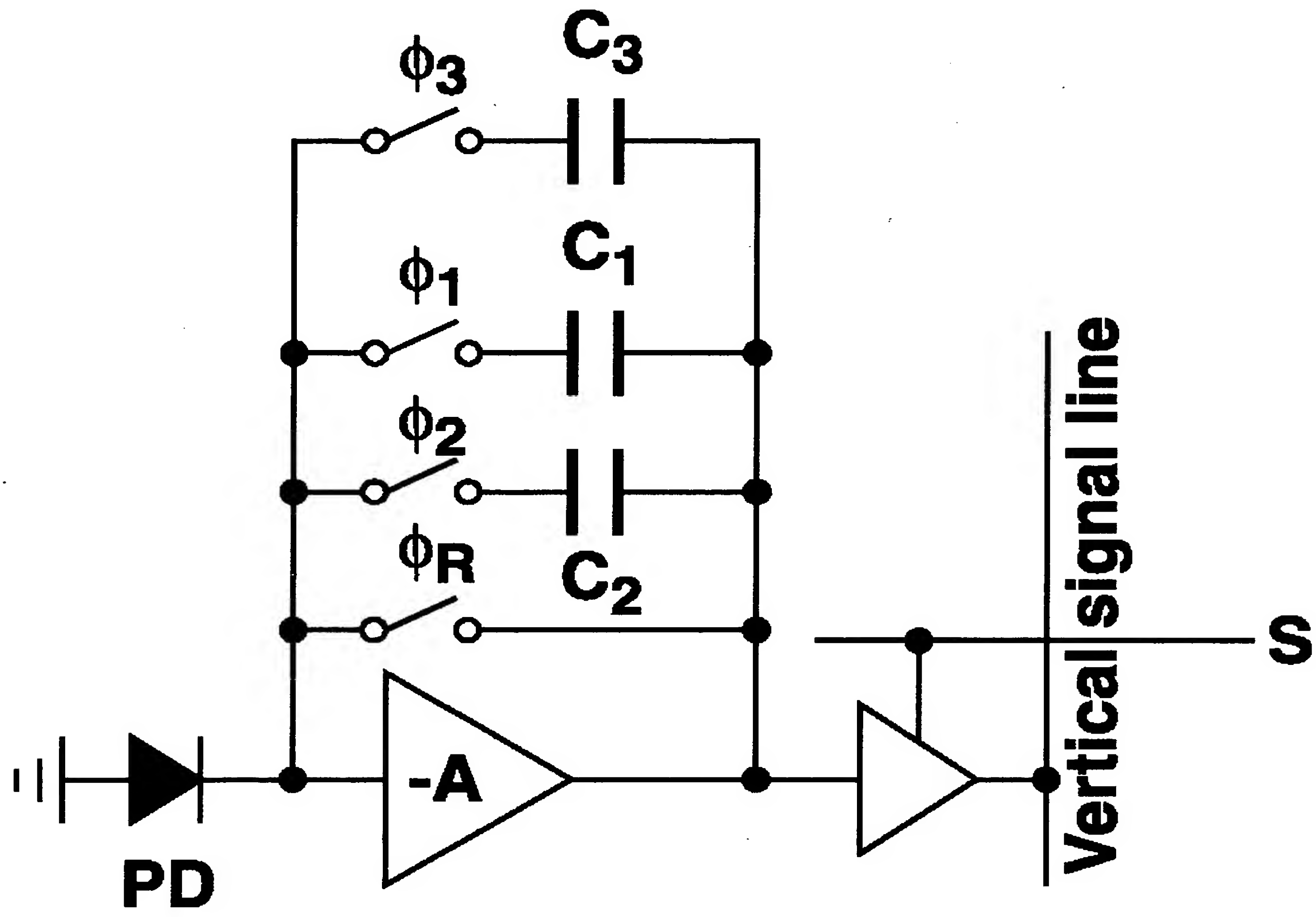


Fig.11

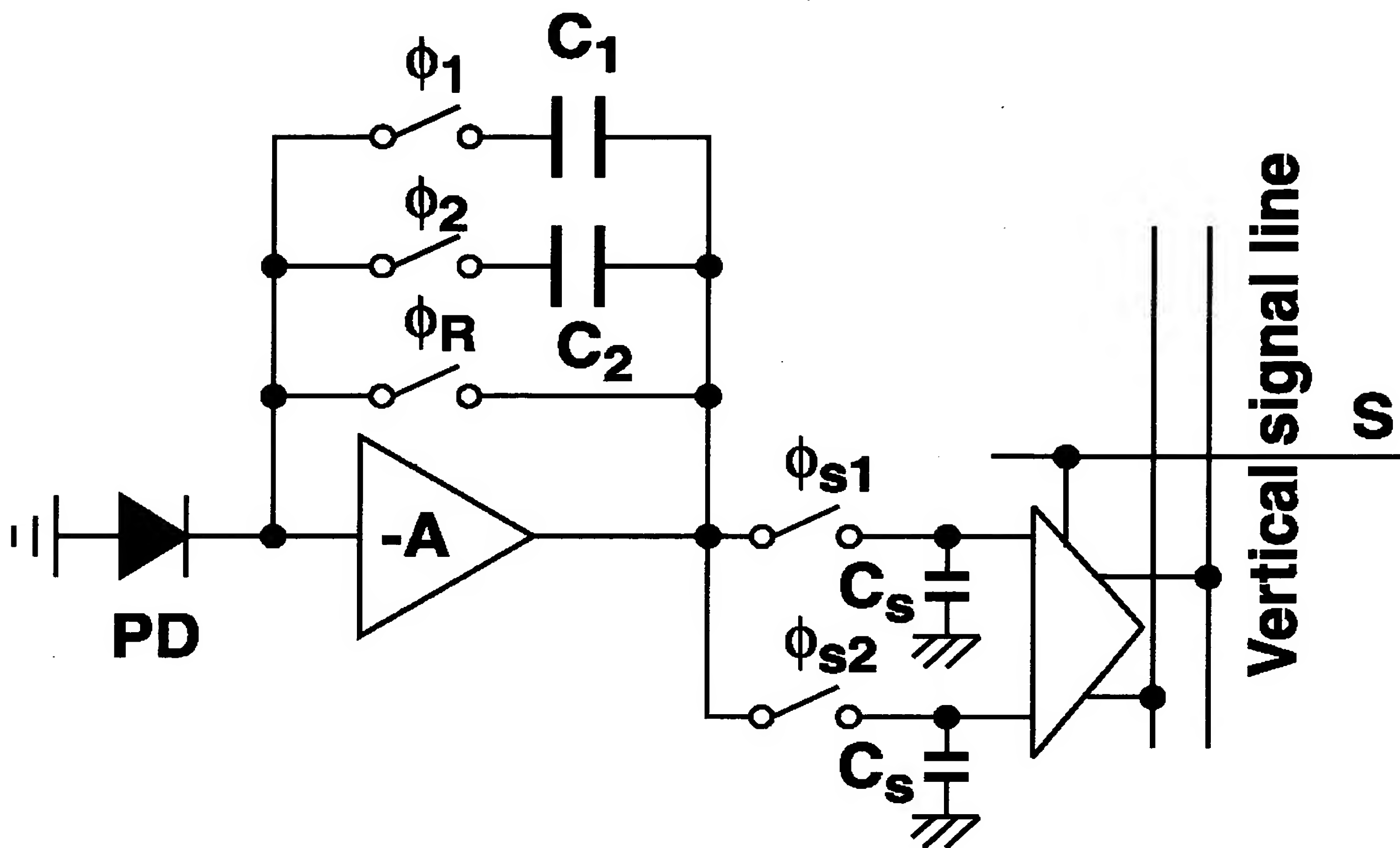


Fig.12

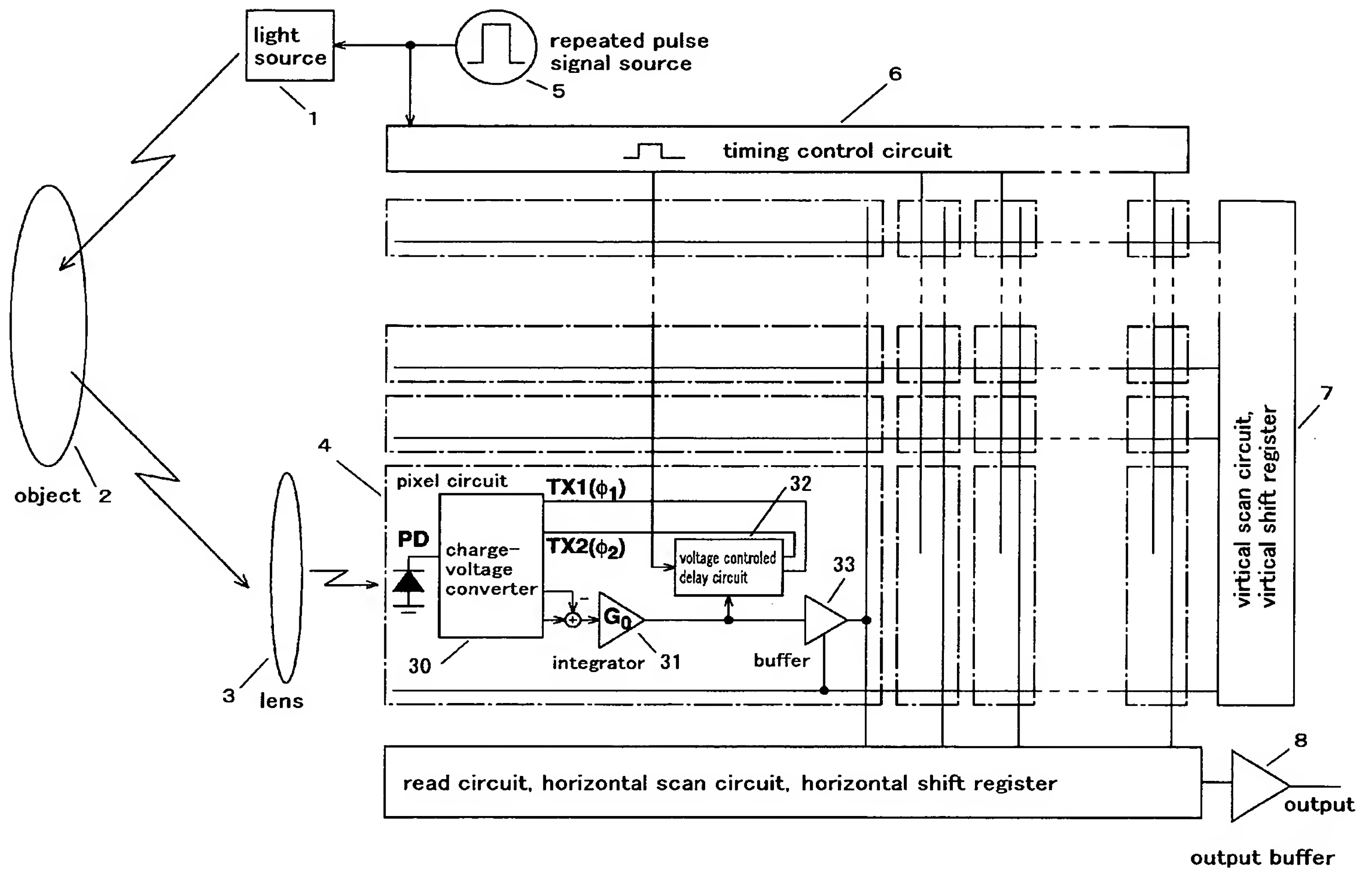


Fig.13

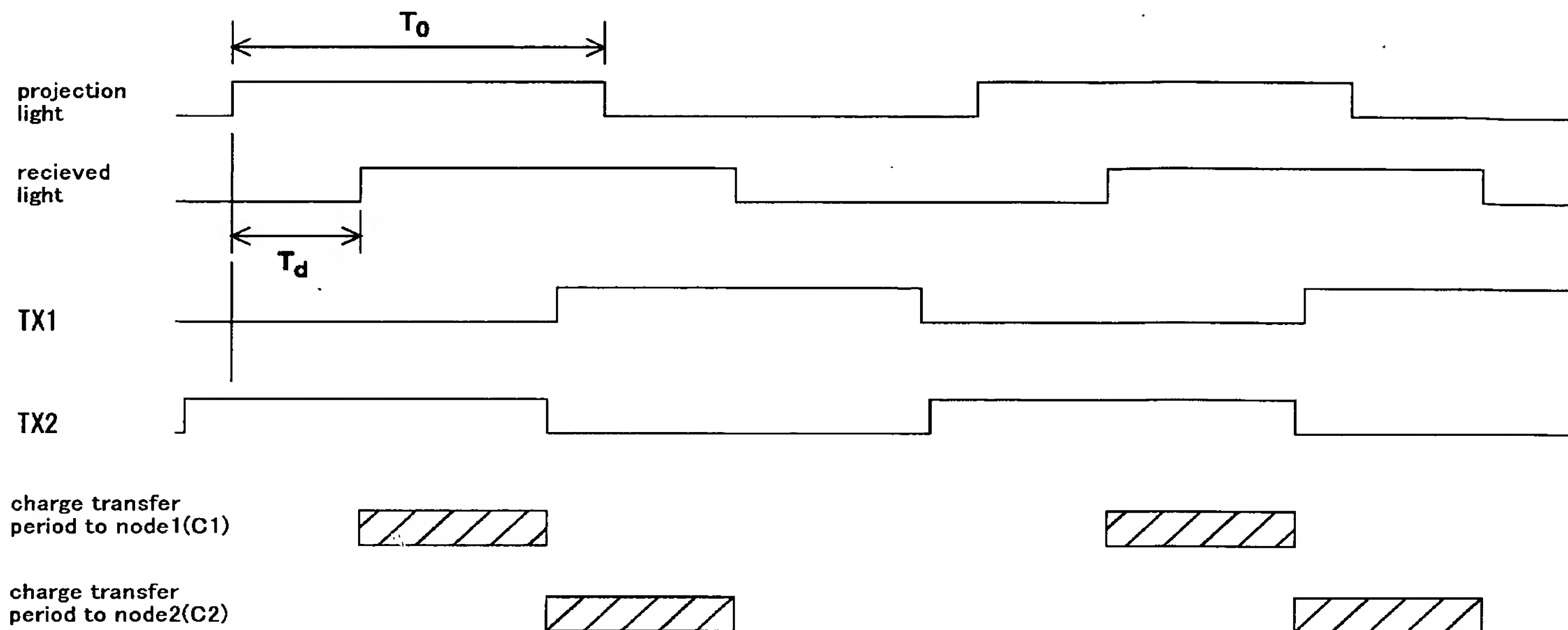


Fig.14

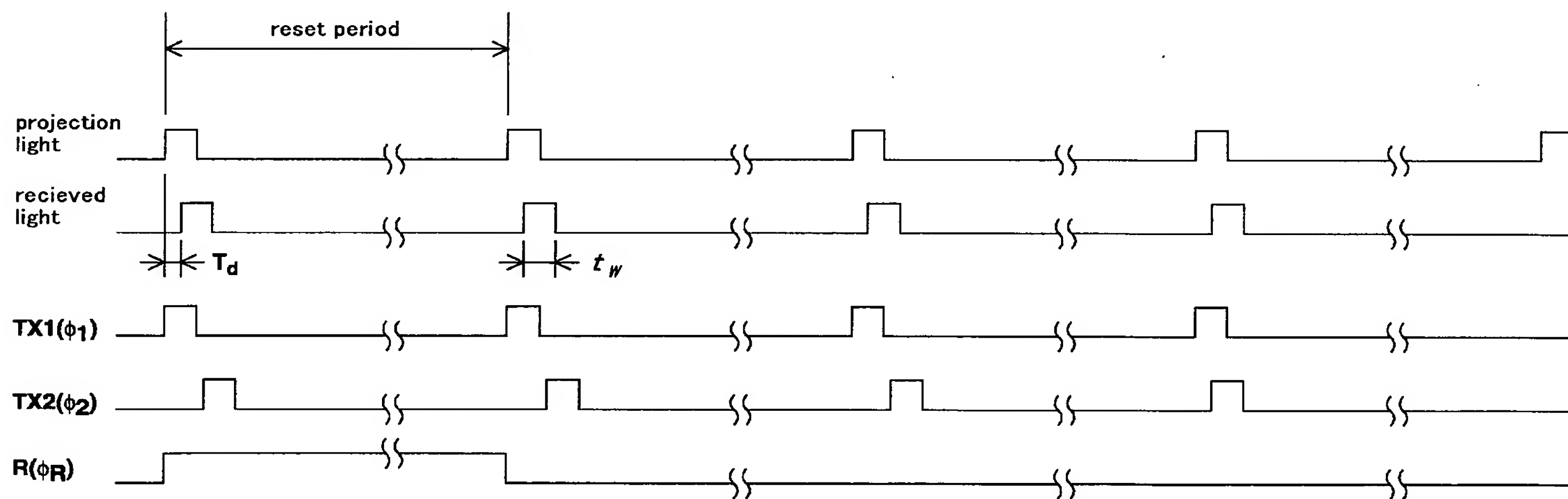


Fig.15

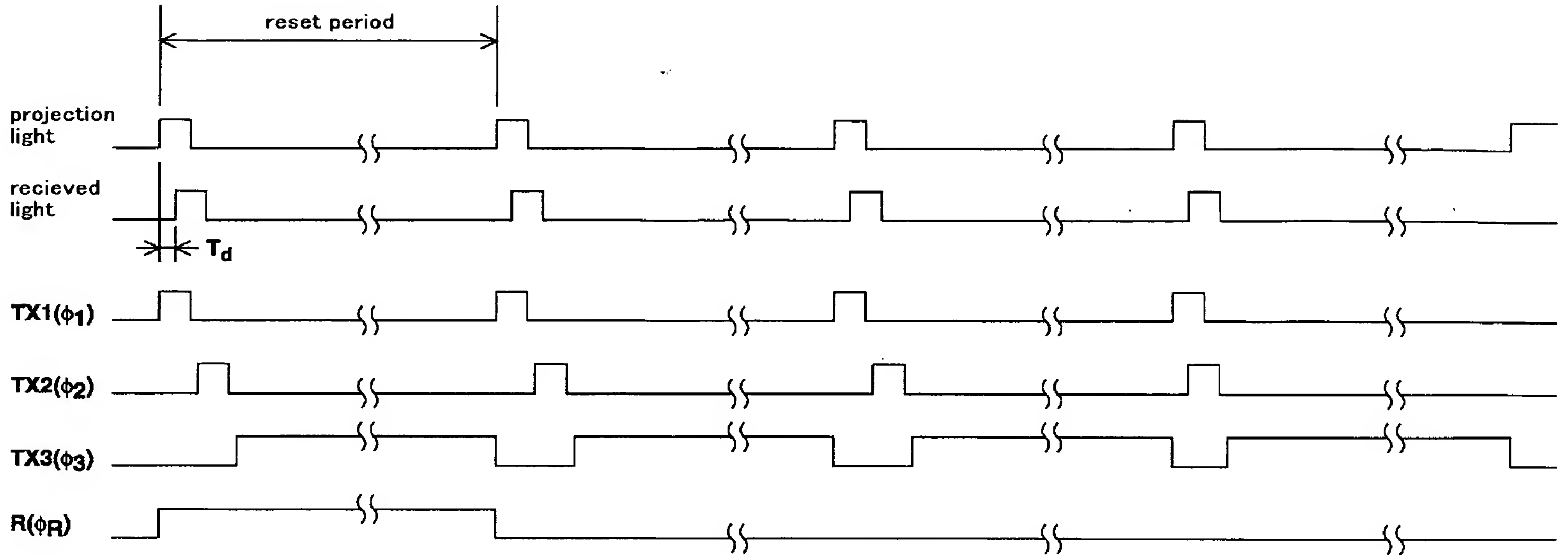


Fig.16

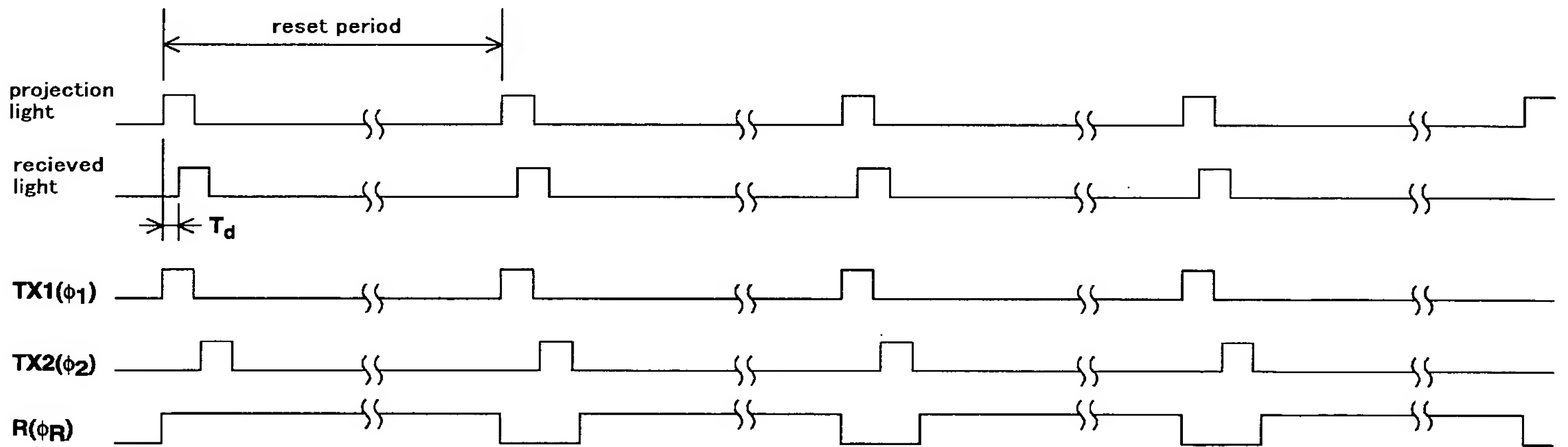


Fig.17

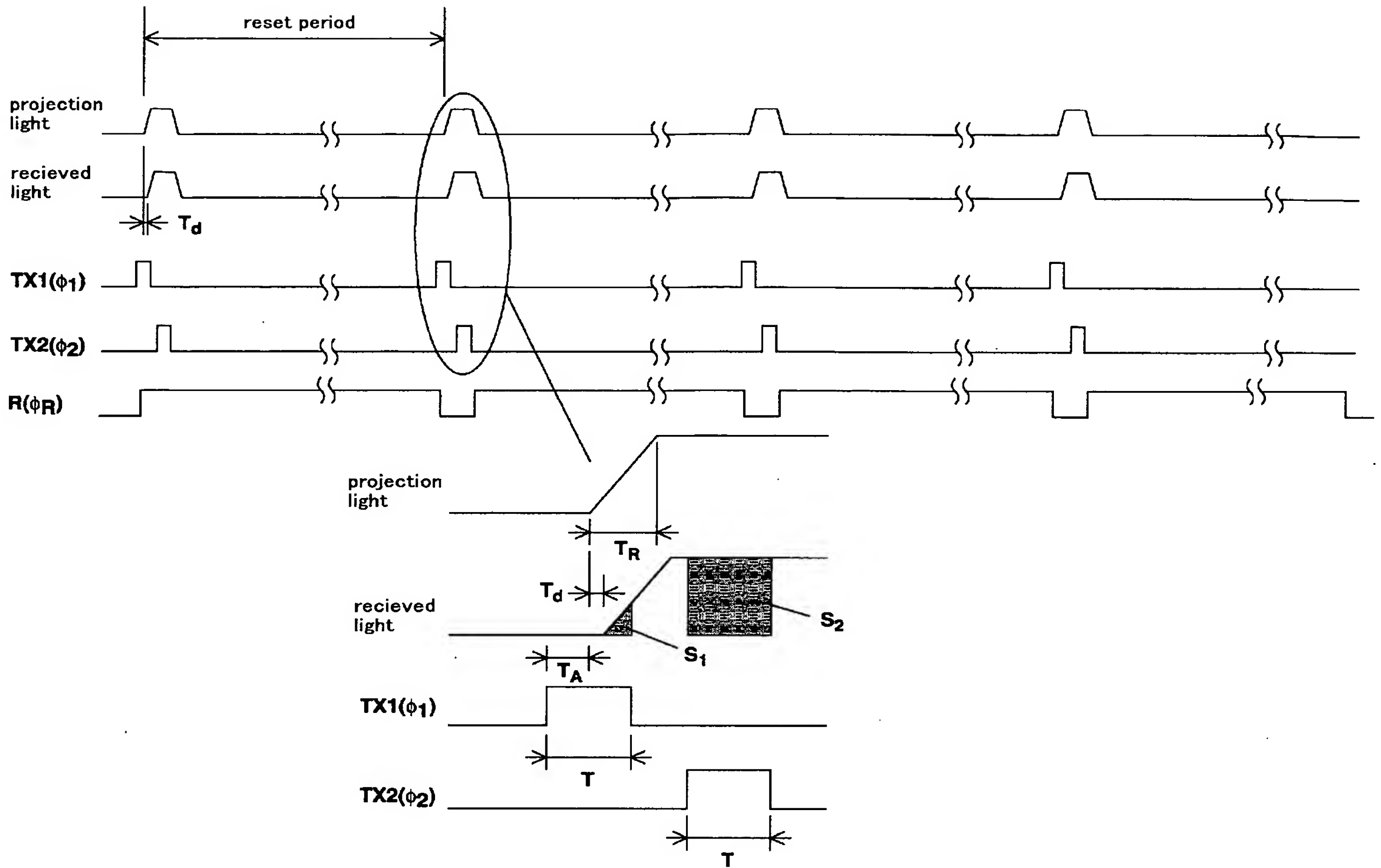
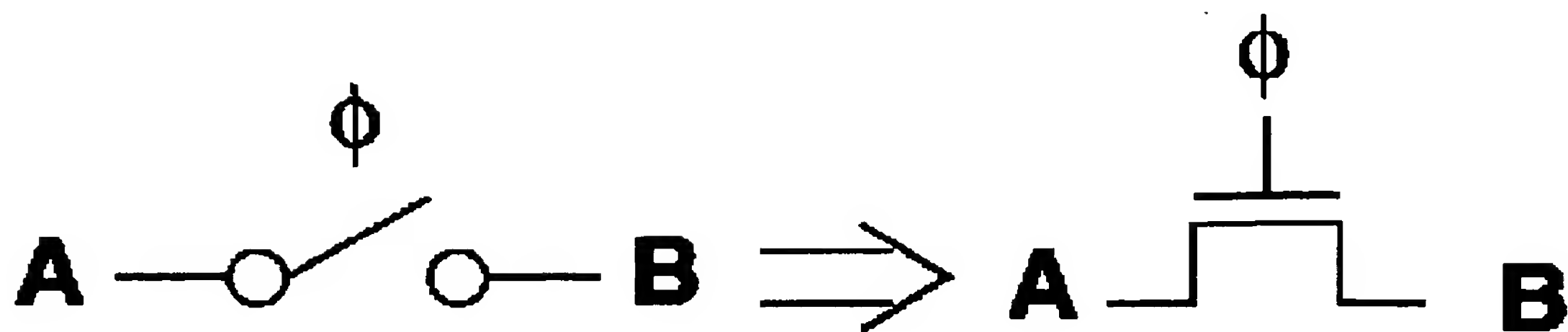
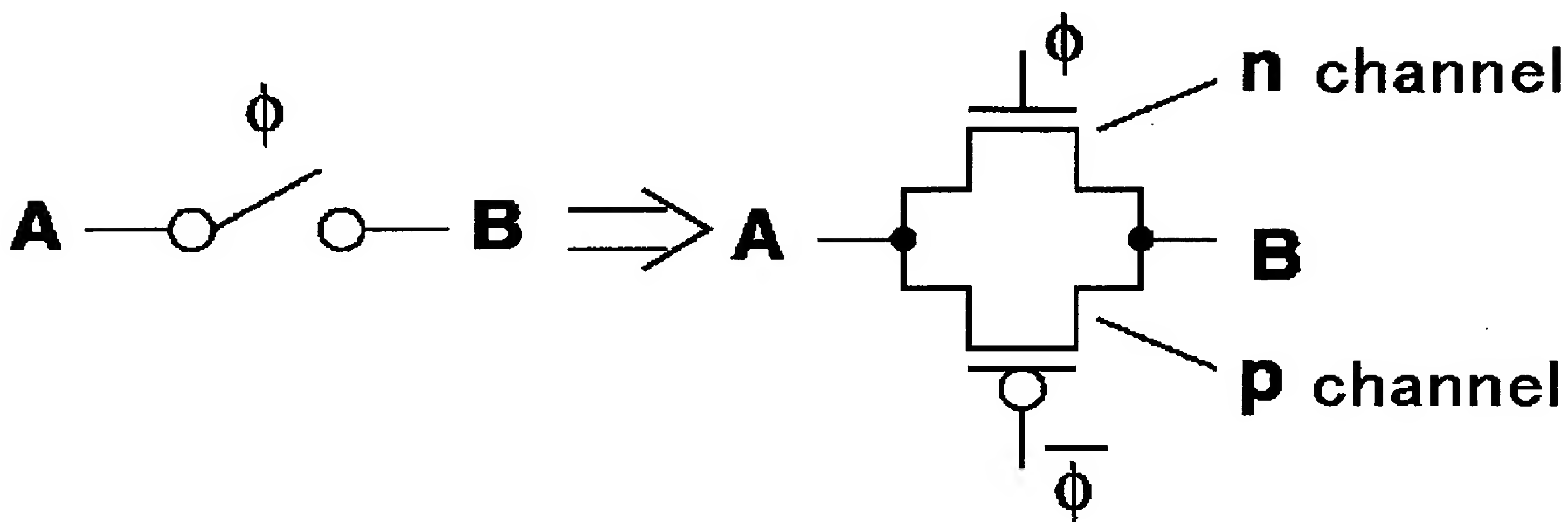


Fig.18



(a) n channel MOS transistor



(b) CMOS type switch

Fig.19

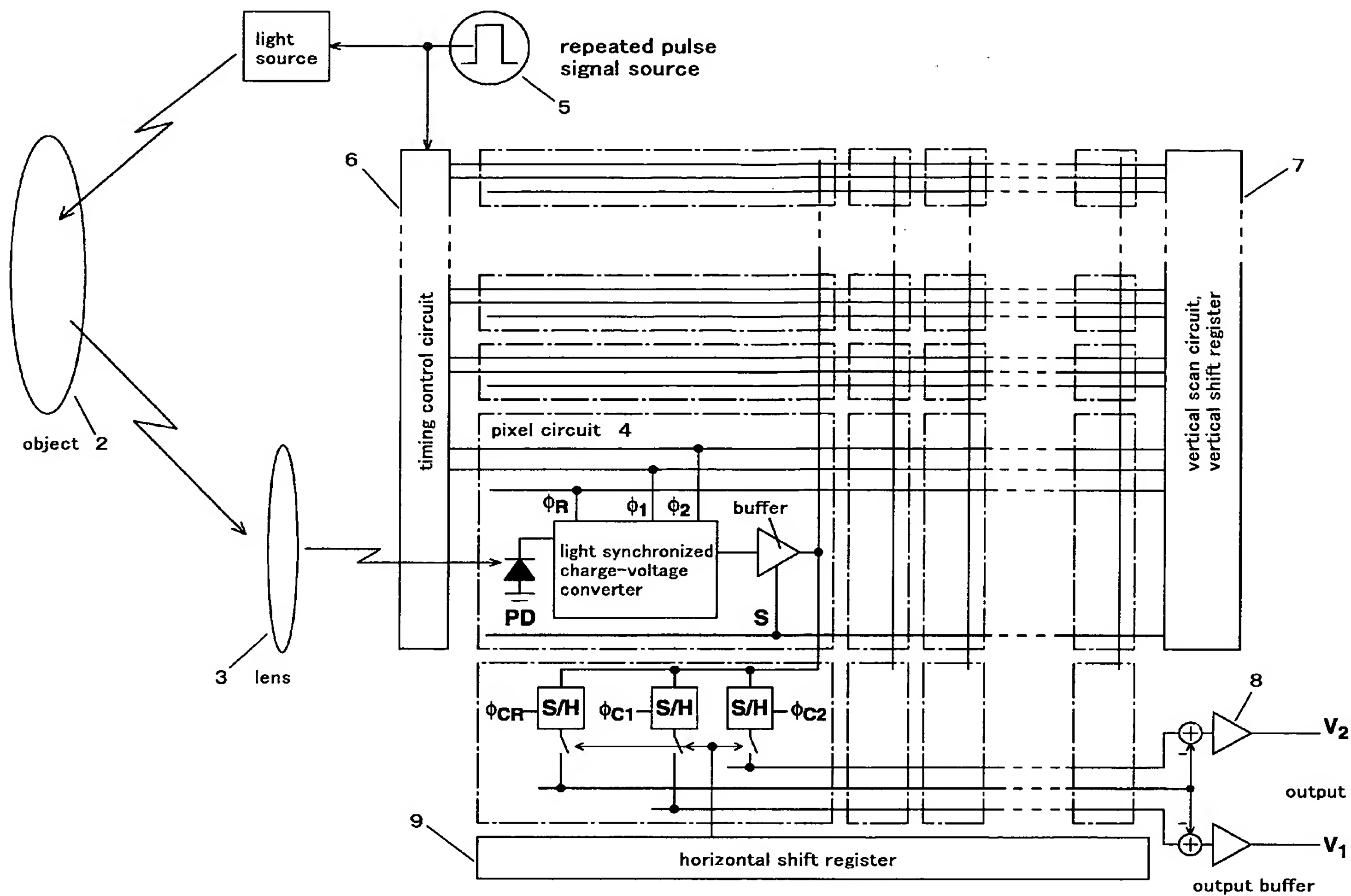


Table 1

Delay time measurement resolution	Measurement distance resolution
10 μ s	1.5 km
1 μ s	150 m
100 ns	15 m
10 ns	1.5 m
1 ns	15 cm
100 ps	1.5 cm
10 ps	1.5 mm
1 ps	0.15 mm

Table 1 Relationship between delay time measurement resolution and distance resolution based on the TOF method